

American Journal of
Food Sciences and Nutrition
(AJFSN)



**Effects of Plant-Based Diets on Cardiovascular Health
in Burundi**

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Article history

Submitted 26.03.2024 Revised Version Received 01.05.2024 Accepted 04.06.2024

Abstract

Purpose: The aim of the study was to assess the effects of plant-based diets on cardiovascular health in Burundi.

Methodology: This study adopted a desk methodology. A desk study research design is commonly known as secondary data collection. This is basically collecting data from existing resources preferably because of its low cost advantage as compared to a field research. Our current study looked into already published studies and reports as the data was easily accessed through online journals and libraries.

Findings: The study indicated that adopting a plant-based diet, which emphasizes fruits, vegetables, whole grains, legumes, nuts, and seeds while minimizing or excluding animal products, can lead to various positive outcomes for heart health. These diets are associated with lower blood pressure, reduced cholesterol levels (especially LDL cholesterol), and improved blood sugar control. Additionally, plant-based diets are often higher in fiber, antioxidants, and other beneficial nutrients that contribute to overall

cardiovascular well-being. The study also suggest that individuals following plant-based diets have a lower risk of developing heart disease, stroke, and other cardiovascular conditions compared to those with less plant-centric eating patterns. Overall, the evidence suggests that plant-based diets can play a significant role in promoting cardiovascular health and reducing the risk of heart-related diseases.

Implications to Theory, Practice and Policy: Health belief model, social cognitive theory and theory of planned behavior may be used to anchor future studies on assessing the effects of plant-based diets on cardiovascular health in Burundi. Healthcare practitioners should integrate dietary counseling, emphasizing plant-based nutrition, into routine clinical practice. Public health policies should prioritize and support dietary education initiatives focused on plant-based nutrition.

Keywords: *Plant-Based Diets, Cardiovascular, Health*

INTRODUCTION

Plant-based diets have been increasingly recognized for their positive effects on cardiovascular health, particularly in developed economies like the USA and Japan. In the USA, a study found that individuals adhering to a plant-based diet experienced a 16% lower risk of cardiovascular disease and a 31% lower risk of dying from cardiovascular disease compared to those with less plant-based food intake (Satija, Bhupathiraju, Spiegelman, Chiuve, Manson, Willett & Hu, 2019). Similarly, in Japan, the traditional diet, which is heavily plant-based with a focus on vegetables, soy products, and fish, has been associated with lower rates of heart disease. For example, research indicates that Japanese men and women have among the lowest rates of coronary artery disease globally, which is partly attributed to their plant-rich diet (Nakamura, Saito, Ueshima, & Horiuchi, 2018). These trends highlight the significant cardiovascular benefits associated with plant-based diets in developed countries.

In the UK, a similar trend is observed where a shift towards plant-based diets is linked with improved heart health. A large cohort study found that those following a vegetarian diet had a 32% lower risk of ischemic heart disease compared to non-vegetarians (Crowe, Appleby, Travis & Key, 2019). This reduction is attributed to lower blood pressure, cholesterol levels, and body mass index, which are common outcomes of plant-based dietary patterns. These findings underscore the critical role that diet, particularly plant-based eating, plays in maintaining cardiovascular health and reducing disease prevalence in developed economies.

In developing economies, the adoption of plant-based diets is also showing promising effects on cardiovascular health. For instance, in India, a predominantly plant-based diet has traditionally been linked to lower incidences of cardiovascular diseases. A study showed that rural Indian populations, which consume diets rich in legumes, vegetables, and whole grains, had significantly lower rates of heart disease compared to urban populations that consume more meat and processed foods (Gupta, Yusuf, Kutty & Maulik, 2020). Similarly, in Brazil, dietary patterns that include a high intake of fruits, vegetables, and legumes have been associated with a reduced risk of cardiovascular diseases, highlighting the benefits of plant-based diets in improving heart health (Sichieri, Pereira & Martins, 2018).

These trends are supported by increasing evidence that plant-based diets contribute to better health outcomes in these regions. For example, in Mexico, transitioning to a diet with higher consumption of plant-based foods has been associated with reductions in blood pressure and cholesterol levels, which are key risk factors for cardiovascular diseases (Medina-Remón, Kirwan, Fito & Martinez-Gonzalez, 2021). As developing economies continue to urbanize and face rising rates of non-communicable diseases, promoting plant-based diets can be an effective strategy to combat cardiovascular health issues.

Similarly, in Brazil, a country experiencing rapid urbanization, there has been a shift towards diets high in processed foods. However, traditional Brazilian diets, which include a high intake of fruits, vegetables, and legumes, have been linked with a reduced risk of cardiovascular diseases. Research shows that individuals who maintain traditional, plant-based eating patterns exhibit lower blood pressure and healthier cholesterol profiles (Sichieri, Pereira & Martins, 2018). Promoting these traditional dietary habits in the face of dietary transitions can be an effective public health strategy to mitigate the burden of cardiovascular diseases. Additionally, policy measures aimed at

increasing access to affordable plant-based foods can support this dietary shift and improve cardiovascular outcomes.

In developing economies, plant-based diets are becoming increasingly recognized for their beneficial effects on cardiovascular health. For instance, in China, traditional diets rich in vegetables, soy products, and rice have been associated with lower incidences of cardiovascular diseases. A study revealed that Chinese adults who followed a predominantly plant-based diet had significantly lower rates of coronary artery disease compared to those consuming higher amounts of animal-based foods (Chen, Zhang, Yang & Wang, 2019). The protective effect is attributed to the high fiber content and low saturated fat in these traditional diets, which help to maintain healthy cholesterol levels and blood pressure. As China experiences rapid urbanization and lifestyle changes, promoting traditional plant-based diets could be crucial in combating the rising prevalence of cardiovascular diseases.

Similarly, in Thailand, dietary patterns that emphasize plant-based foods, such as vegetables, fruits, and rice, are linked to better cardiovascular health outcomes. Research indicates that Thai adults who adhere to traditional diets exhibit lower blood pressure and healthier lipid profiles than those consuming more Westernized diets (Aekplakorn, Satheannoppakao, Putwatana & Taneepanichskul, 2020). The study highlights the importance of maintaining traditional dietary habits to reduce the risk of cardiovascular diseases. Public health initiatives in Thailand are increasingly focusing on promoting plant-based diets as a preventive strategy against the growing burden of cardiovascular diseases. Encouraging the consumption of traditional foods can help mitigate the adverse health impacts of dietary transitions in rapidly developing urban areas.

In sub-Saharan Africa, the impact of plant-based diets on cardiovascular health is becoming more evident, although comprehensive data is still limited. In Ethiopia, traditional diets that are high in plant-based foods such as teff, lentils, and vegetables are associated with lower rates of cardiovascular diseases. A study found that Ethiopians who consumed a diet rich in these foods had significantly lower levels of hypertension and cholesterol compared to those who adopted more Westernized dietary patterns (Baye, 2020). The benefits of these traditional diets are attributed to their high fiber content and low levels of unhealthy fats, which contribute to better cardiovascular health outcomes. Promoting these traditional dietary patterns can be an effective strategy to combat the rising prevalence of cardiovascular diseases in urban areas undergoing rapid dietary transitions.

In Ghana, the consumption of traditional plant-based foods such as yams, plantains, and beans has been linked to lower cardiovascular risk factors. Research shows that Ghanaians who maintain traditional dietary practices have lower blood pressure and healthier cholesterol levels compared to those who consume more processed and animal-based foods (Owiredu, Amidu & Woode, 2020). These findings highlight the importance of traditional plant-based diets in maintaining cardiovascular health and preventing heart diseases. Public health policies in Ghana are increasingly focusing on encouraging the consumption of these traditional foods to improve population health outcomes. As urbanization continues, reinforcing traditional dietary habits can help mitigate the health impacts of dietary changes and reduce the burden of cardiovascular diseases.

In Nigeria, similar trends are observed. Diets rich in fruits, vegetables, and legumes are linked to lower blood pressure and reduced risk of heart disease. A systematic review found that adherence

to traditional diets in Nigeria is associated with better cardiovascular outcomes compared to more Westernized diets (Ogunmola, Olamoyegun & Oladosu, 2018). These findings suggest that maintaining or returning to traditional plant-based diets can significantly contribute to reducing the incidence of cardiovascular diseases. As sub-Saharan economies continue to develop and urbanize, public health policies should encourage the consumption of traditional, plant-based foods to mitigate the growing burden of cardiovascular diseases.

In South Africa, increasing evidence supports the benefits of plant-based diets for cardiovascular health. Studies have shown that higher intake of plant-based foods is associated with lower levels of hypertension and reduced cholesterol levels among South African adults. For instance, a study highlighted that individuals who consumed more fruits and vegetables had significantly lower risks of developing cardiovascular diseases (Steyn, Burger, Monyeki & Alberts, 2019). These findings emphasize the importance of promoting plant-based diets as a preventative measure against cardiovascular diseases in sub-Saharan Africa. Integrating these dietary practices into national health strategies can enhance public health outcomes and reduce healthcare costs associated with cardiovascular diseases.

In sub-Saharan Africa, the impact of plant-based diets on cardiovascular health is increasingly recognized, although the data is less abundant. In countries like Kenya, traditional diets that are high in plant-based foods such as maize, beans, and vegetables are associated with lower rates of cardiovascular diseases. Research indicates that communities adhering to these traditional diets have better heart health outcomes compared to those adopting Western dietary patterns high in processed foods and red meats (Muthuri, Francis, Wachira, LeBlanc, Sampson, Onywera & Tremblay, 2019). Similarly, in Nigeria, a diet rich in fruits, vegetables, and legumes is linked to lower blood pressure and reduced risk of heart disease (Ogunmola, Olamoyegun & Oladosu, 2018).

A conceptual analysis of diet types, particularly plant-based versus omnivorous diets, reveals significant differences in their impacts on cardiovascular health markers such as cholesterol levels, blood pressure, body mass index (BMI), and inflammatory markers. Plant-based diets, which emphasize fruits, vegetables, legumes, nuts, and whole grains, have been associated with lower levels of LDL cholesterol, reduced blood pressure, and lower BMI compared to omnivorous diets that include both plant and animal products (Satija, Bhupathiraju, Spiegelman, Chiuve, Manson, Willett & Hu, 2019). The high fiber content and absence of dietary cholesterol in plant-based diets contribute to these beneficial effects by promoting heart health and reducing the risk of atherosclerosis. In contrast, omnivorous diets, particularly those high in red and processed meats, are linked to higher LDL cholesterol and increased blood pressure due to higher saturated fat intake (Chen, Zhang, Yang & Wang, 2019). This distinction highlights the importance of diet composition in managing cardiovascular health and preventing related diseases.

Further differentiating these diets, research has shown that plant-based diets are associated with lower levels of inflammatory markers, such as C-reactive protein (CRP), which are predictive of cardiovascular events (Gupta, Yusuf, Kutty & Maulik, 2020). Additionally, plant-based diets are often rich in antioxidants and phytonutrients that help reduce oxidative stress and inflammation, further protecting cardiovascular health. On the other hand, omnivorous diets can lead to higher levels of inflammatory markers due to the consumption of animal products that may promote inflammation (Steyn, Burger, Monyeki & Alberts, 2019). The cumulative evidence underscores the potential cardiovascular benefits of adopting plant-based diets over omnivorous diets,

emphasizing their role in lowering cholesterol levels, blood pressure, BMI, and inflammatory markers. This comprehensive understanding supports dietary recommendations favoring plant-based foods for cardiovascular health maintenance and disease prevention.

Problem Statement

Despite the increasing evidence supporting the benefits of plant-based diets on cardiovascular health, the prevalence of cardiovascular diseases (CVDs) remains high globally, posing a significant public health challenge. Cardiovascular diseases are a leading cause of mortality and morbidity, influenced by dietary habits that can either mitigate or exacerbate health risks. Plant-based diets, which emphasize the consumption of fruits, vegetables, whole grains, legumes, nuts, and seeds, have been associated with lower risks of CVDs due to their positive effects on cholesterol levels, blood pressure, and inflammatory markers (Satija, Bhupathiraju, Spiegelman, Chiuve, Manson, Willett & Hu, 2019). Conversely, diets high in animal products and processed foods contribute to adverse cardiovascular outcomes, including elevated LDL cholesterol and hypertension (Chen, Zhang, Yang & Wang, 2019). Therefore, understanding the specific mechanisms and population-wide impacts of plant-based diets on cardiovascular health is crucial for developing effective dietary guidelines and public health strategies to combat the persistent burden of CVDs.

Theoretical Framework

Health Belief Model (HBM)

The Health Belief Model (HBM) was developed in the 1950s by social psychologists Hochbaum, Rosenstock and Kegels. The main theme of HBM is that individuals are likely to adopt healthier behaviors, such as plant-based diets, if they believe they are susceptible to health problems (perceived susceptibility), believe the health problem has serious consequences (perceived severity), believe taking a specific action would reduce their susceptibility to or severity of the health problem (perceived benefits), and believe the benefits of taking the action outweigh the costs or barriers (perceived barriers). This model is relevant to studying plant-based diets as it helps explain how beliefs about the benefits of plant-based eating can influence dietary behaviors, which in turn affect cardiovascular health (Champion & Skinner, 2018).

Social Cognitive Theory (SCT)

Social Cognitive Theory (SCT), developed by Albert Bandura in the 1980s, focuses on the dynamic interplay between personal factors, environmental influences, and behavior. The main theme of SCT is that behavior change, such as adopting a plant-based diet, is influenced by observational learning, self-efficacy, and outcome expectations. This theory is pertinent to understanding how exposure to positive dietary behaviors (e.g., through media or social networks) and an individual's confidence in their ability to make dietary changes can affect their food choices and subsequently their cardiovascular health (Glanz, Rimer & Viswanath, 2020).

Theory of Planned Behavior (TPB)

The Theory of Planned Behavior (TPB), proposed by Icek Ajzen in the late 1980s, posits that an individual's intention to engage in a behavior is the most significant predictor of that behavior. This intention is shaped by three factors: attitudes toward the behavior, subjective norms, and perceived behavioral control. TPB is relevant to research on plant-based diets as it helps in understanding how attitudes toward plant-based eating, social pressures, and the perceived ease or

difficulty of maintaining such a diet influence individuals' dietary practices, thereby impacting cardiovascular health outcomes (Ajzen, 2020).

Empirical Review

Smith, Brown and Johnson (2019) evaluated the impact of plant-based diets on cardiovascular health, focusing on blood pressure and lipid profiles among adults. This randomized controlled trial (RCT) included 200 participants who were divided into two groups: one following a strict plant-based diet and the other adhering to a traditional omnivorous diet over a 12-month period. Health assessments were conducted regularly to monitor changes. The findings revealed that participants on the plant-based diet experienced significant reductions in both systolic and diastolic blood pressure, with an average decrease of 10 mmHg and 8 mmHg, respectively, compared to the control group. Additionally, there was a notable improvement in lipid profiles, including a 20% reduction in LDL cholesterol levels. These results suggest that plant-based diets can substantially improve cardiovascular health markers. The study recommends the adoption of a plant-based diet for individuals aiming to enhance cardiovascular health. Furthermore, healthcare providers should consider dietary modifications as a primary intervention for patients suffering from hypertension and hyperlipidemia. The empirical evidence supports the cardiovascular benefits of plant-based diets, making a compelling case for their promotion in clinical settings. This study underscores the potential of diet-based interventions to reduce the risk of cardiovascular diseases. It is essential to integrate dietary counseling into routine healthcare practices to maximize patient outcomes. The positive health effects observed in this study provide a strong basis for further research and public health initiatives aimed at dietary improvements.

Williams, Thompson and Green (2020) explored the long-term effects of plant-based diets on the incidence of cardiovascular diseases (CVD) among middle-aged adults. The cohort study followed 1,500 adults aged 40-60 for a decade, utilizing food frequency questionnaires to assess dietary intake and medical records to track cardiovascular events. The study found that individuals adhering to plant-based diets had a 25% lower risk of developing cardiovascular diseases compared to those consuming a diet high in animal products. The protective effect was attributed to the higher intake of fiber, antioxidants, and phytochemicals found in plant-based foods. These components are known to play a crucial role in cardiovascular health by reducing oxidative stress and improving vascular function. The study strongly recommends long-term adherence to plant-based diets as an effective strategy for cardiovascular disease prevention. Public health policies should support dietary education and increase accessibility to plant-based foods to promote better cardiovascular outcomes. The findings highlight the importance of dietary patterns in managing and preventing chronic diseases. Healthcare systems should prioritize nutritional education as a key component of preventive medicine. The study's robust design and long follow-up period provide significant insights into the long-term benefits of plant-based diets. Encouraging dietary shifts towards plant-based foods can lead to substantial public health improvements. This research adds to the growing body of evidence supporting the cardiovascular benefits of plant-based diets.

Miller, Davis and Garcia (2021) investigated the relationship between plant-based diets and inflammatory markers linked to cardiovascular health. The study included 800 participants who were categorized based on their dietary patterns. Blood samples were analyzed for inflammatory markers such as C-reactive protein (CRP) and interleukin-6 (IL-6). The findings revealed that individuals following plant-based diets had significantly lower levels of CRP and IL-6 compared to those on omnivorous diets. These results indicate reduced inflammation and a potential lower

risk for cardiovascular events among the plant-based diet group. Inflammation is a key factor in the development and progression of cardiovascular diseases, making these findings particularly relevant. The study suggests that the anti-inflammatory properties of plant-based diets can play a crucial role in cardiovascular disease prevention. The reduction in inflammatory markers supports the adoption of plant-based diets as a strategy to enhance cardiovascular health. Further research should explore the specific mechanisms through which plant-based diets exert their anti-inflammatory effects. The study recommends healthcare professionals to consider plant-based diets as part of a comprehensive approach to reducing cardiovascular risk. Dietary interventions focusing on plant-based foods can significantly impact public health outcomes. The empirical evidence from this study reinforces the importance of diet in managing inflammation and improving cardiovascular health. This research provides a strong foundation for future studies and public health policies promoting plant-based nutrition.

Nguyen, Lee and Martinez (2018) assessed the cardiovascular health benefits of vegan diets in individuals with type 2 diabetes. The randomized controlled trial (RCT) involved 150 diabetic patients who were assigned to either a vegan diet group or a standard diabetic diet group for six months. Key cardiovascular health markers, including HbA1c, blood pressure, and cholesterol levels, were measured throughout the study. The results showed that the vegan diet group experienced significant improvements in HbA1c levels, blood pressure, and lipid profiles compared to the control group. These findings indicate that a vegan diet can lead to better overall cardiovascular health in diabetic patients. The study suggests that vegan diets should be considered a beneficial dietary approach for managing diabetes and enhancing cardiovascular health. Healthcare practitioners should integrate dietary counseling into diabetes management to maximize patient outcomes. The significant health benefits observed in this study highlight the potential of vegan diets to reduce cardiovascular risk in diabetic patients. Further research is needed to understand the long-term effects of vegan diets on cardiovascular health in this population. The study's findings support the promotion of vegan diets as a therapeutic option for improving health outcomes in individuals with type 2 diabetes. This research underscores the importance of dietary interventions in managing chronic diseases and improving overall health. The positive outcomes observed in this study provide a strong rationale for recommending vegan diets in clinical practice.

Roberts, Evans and Kim (2022) aimed to determine the effects of plant-based diets on arterial stiffness, a key indicator of cardiovascular health. This longitudinal study tracked 500 participants over five years, monitoring their dietary patterns and measuring arterial stiffness using pulse wave velocity (PWV). The findings revealed that participants consuming a predominantly plant-based diet exhibited a significant reduction in PWV, indicating decreased arterial stiffness and improved cardiovascular health. Arterial stiffness is a critical factor in the development of cardiovascular diseases, making these findings highly relevant. The study suggests that plant-based diets can effectively reduce arterial stiffness, thereby lowering cardiovascular risk. These results provide compelling evidence for the cardiovascular benefits of plant-based diets. The study recommends that dietary guidelines emphasize plant-based nutrition to improve cardiovascular health outcomes. Further research should investigate the specific dietary components that contribute to reduced arterial stiffness. The positive effects observed in this study highlight the potential of plant-based diets to enhance vascular health and prevent cardiovascular diseases. Healthcare providers should consider incorporating dietary counseling focused on plant-based nutrition into

routine practice. This research adds to the growing body of evidence supporting the health benefits of plant-based diets. The study's longitudinal design and robust methodology provide significant insights into the long-term effects of plant-based diets on cardiovascular health.

Thompson, Harris and White (2021) conducted a study to compare the cardiovascular health effects of a Mediterranean diet and a strict plant-based diet. This randomized controlled trial (RCT) involved 300 participants who were divided into two dietary groups: one following a Mediterranean diet and the other adhering to a strict plant-based diet over an 18-month period. Key cardiovascular health markers, including cholesterol levels, blood pressure, and body mass index (BMI), were monitored throughout the study. Both dietary groups experienced significant improvements in cardiovascular health markers. However, the plant-based diet group showed greater reductions in LDL cholesterol and BMI compared to the Mediterranean diet group. Blood pressure improvements were comparable between the two groups. These findings suggest that while both diets are beneficial for cardiovascular health, plant-based diets may offer superior benefits in cholesterol management and weight reduction. The study recommends the adoption of plant-based dietary patterns to enhance cardiovascular health outcomes. Further research should explore the long-term effects of these diets on cardiovascular health. Healthcare providers should consider recommending plant-based diets as a strategy for improving cardiovascular health. The comparative analysis in this study provides valuable insights into the relative benefits of different dietary patterns. The findings support the promotion of plant-based diets for better cardiovascular health.

Patel, Singh and Kumar (2023) investigated the role of plant-based diets in the prevention and management of coronary artery disease (CAD). This case-control study included 400 patients with CAD and 400 matched controls without CAD. Dietary intake was assessed using food frequency questionnaires, and the prevalence of CAD was analyzed in relation to dietary patterns. The study found that individuals adhering to plant-based diets had a significantly lower prevalence of CAD compared to those on diets high in animal products. The protective effect of plant-based diets was attributed to improved lipid profiles and reduced inflammation. These findings suggest that plant-based diets can play a crucial role in reducing the risk of coronary artery disease. The study recommends that individuals at risk of or managing CAD adopt plant-based dietary patterns to improve cardiovascular health. Cardiologists and healthcare providers should incorporate dietary counseling focused on plant-based nutrition into routine practice. The significant health benefits observed in this study highlight the potential of plant-based diets to enhance cardiovascular outcomes. Further research is needed to understand the long-term effects of plant-based diets on coronary artery disease. The empirical evidence supports the promotion of plant-based diets for the prevention and management of CAD. This research provides a strong foundation for future studies and public health initiatives promoting plant-based nutrition.

METHODOLOGY

This study adopted a desk methodology. A desk study research design is commonly known as secondary data collection. This is basically collecting data from existing resources preferably because of its low cost advantage as compared to a field research. Our current study looked into already published studies and reports as the data was easily accessed through online journals and libraries.

RESULTS

Conceptual Gaps: While studies like that of Smith, Brown and Johnson (2019) and Williams, Thompson and Green (2020) have demonstrated the positive impact of plant-based diets on cardiovascular health markers, there is a conceptual gap regarding the specific mechanisms through which plant-based diets exert their benefits. Further research is needed to elucidate the biochemical pathways and physiological changes that underpin the cardiovascular benefits observed in these studies. The study by Miller, Davis and Garcia (2021) highlights the anti-inflammatory properties of plant-based diets in relation to cardiovascular disease prevention. However, there is a conceptual gap in understanding the precise components within plant-based diets that contribute most significantly to their anti-inflammatory effects. Future studies should delve deeper into identifying and isolating these components for targeted dietary interventions.

Contextual Gaps: While the studies by Nguyen, Lee and Martinez (2018) and Roberts, Evans and Kim (2022) demonstrate the cardiovascular benefits of vegan and plant-based diets, respectively, in specific populations such as individuals with type 2 diabetes and those with arterial stiffness, there is a contextual gap regarding the generalizability of these findings across diverse demographic and cultural backgrounds. Further research should explore how cultural and geographical factors may influence the effectiveness of plant-based diets on cardiovascular health outcomes. The comparative study by Thompson, Harris and White (2021) provides insights into the differential effects of Mediterranean and plant-based diets on cardiovascular health markers. However, there is a contextual gap in understanding how variations in dietary patterns within plant-based diets (e.g., vegan, vegetarian, flexitarian) may impact cardiovascular outcomes differently. Future research should explore these nuances to tailor dietary recommendations more effectively.

Geographical Gaps: Most of the studies reviewed are conducted in Western populations, such as those in the United States and Europe, which may limit the generalizability of findings to other geographical regions with different dietary habits and environmental influences Thompson, Harris and White (2021). There is a geographical gap in research on the effects of plant-based diets on cardiovascular health in diverse populations worldwide. Additionally, while the studies provide valuable insights into the benefits of plant-based diets on cardiovascular health, there is a geographical gap in terms of the availability and affordability of plant-based foods in different regions. Future research should consider the geographical variations in access to plant-based foods and their impact on dietary adherence and cardiovascular outcomes.

CONCLUSION AND RECOMMENDATIONS

Conclusion

In conclusion, the collective evidence from empirical studies conducted between 2018 and 2023 consistently demonstrates the substantial benefits of plant-based diets on cardiovascular health. These studies have shown significant reductions in blood pressure, improvements in lipid profiles, decreased inflammatory markers, and enhanced vascular health among individuals adhering to plant-based dietary patterns. The findings underscore the potential of plant-based diets as an effective strategy for preventing and managing cardiovascular diseases.

However, despite the robustness of these findings, there are notable gaps in research that warrant further investigation. Conceptually, there is a need to elucidate the specific mechanisms through which plant-based diets exert their cardiovascular benefits, as well as to identify the key components within these diets responsible for their therapeutic effects. Contextually, studies need

to explore the generalizability of findings across diverse populations and dietary patterns within plant-based diets. Geographically, research should encompass a broader range of populations and consider factors such as access to plant-based foods and cultural dietary preferences.

In light of these gaps, future research should strive for a more comprehensive understanding of the role of plant-based diets in cardiovascular health across various demographic, cultural, and geographical contexts. Moreover, integrating dietary counseling and promoting plant-based nutrition should be prioritized in clinical practice and public health initiatives to maximize cardiovascular health outcomes on a global scale.

Recommendations

The following are the recommendations based on theory, practice and policy:

Theory

Further research should focus on elucidating the specific biochemical and physiological mechanisms through which plant-based diets exert their cardiovascular benefits. This will contribute to advancing theoretical frameworks regarding the impact of dietary interventions on cardiovascular health. Investigate the role of specific components within plant-based diets, such as fiber, antioxidants, and phytochemicals, in influencing cardiovascular health outcomes. Understanding these components' individual contributions will enhance theoretical models of dietary interventions.

Practice

Healthcare practitioners should integrate dietary counseling, emphasizing plant-based nutrition, into routine clinical practice. This will empower patients to make informed dietary choices that promote cardiovascular health. Tailor dietary recommendations within plant-based diets based on individual health profiles and preferences. Adopting a personalized approach will enhance the effectiveness of dietary interventions in clinical practice.

Policy

Public health policies should prioritize and support dietary education initiatives focused on plant-based nutrition. This includes promoting awareness of the cardiovascular benefits of plant-based diets and providing resources for nutritional education. Policy efforts should aim to increase accessibility and affordability of plant-based foods in communities. This can be achieved through subsidies, incentives for food retailers, and promoting local production of plant-based food options.

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